AMENDED CLAIMS

1. (Twice Amended) A jet engine [which produces a supersonic stream of air, said engine] comprising:

[a structure adapted to provide a compression ratio sufficient to produce a supersonic thrust;]

an air intake end [and an exhaust end] to intake air, the air being divided into at least first and second streams; and

[said exhaust end having a partition that divides said exhaust end into a first side and a second side such that a first stream exits said exhaust end on said first side and a second stream of heated air exits said exhaust end on said second side;

a combustion chamber for heating adapted to heat said first stream such that said first stream is expelled from said exhaust end of said engine to produce said supersonic thrust, and]

a [heating] control mechanism [adapted to heat said second stream such that said second stream is expelled from said exhaust end of said jet engine to produce a subsonic thrust adjacent to said first thrust and thereby prevent Mach waves from said supersonic thrust] to control at least one of temperature and velocity of the second stream to control supersonic or subsonic Mach wave formation from the first stream relative to the second stream.

5. (Twice Amended) The jet engine of claim 1, wherein said control mechanism comprises a suppression burner, said suppression burner being designed to heat the air by burning a fuel.

6. (Twice Amended) The jet engine of claim 1, wherein said control mechanism comprises a variable compression ratio fan [which can change its] having a variable compression ratio [and produce heat].

7. (Twice Amended) The jet engine of claim [1] 25, wherein said partition is an inner shell core [of a jet engine].

16. (Twice Amended) The jet engine of claim [14] 35, wherein said heating mechanism is a suppression burner, said suppression burner being designed to heat the air by burning a fuel.

17. (Twice Amended) The jet engine of claim [14] 35, wherein said second passage substantially encloses said first passage.

18. (Twice Amended) The jet engine of claim [14] 35, wherein said jet engine is at least partially surrounded by a shroud, said shroud defining an exterior wall of said second passage.

26. (Amended) The jet engine of claim 25 further comprising:

a combustion chamber to heat said first stream such that said first stream is expelled from said exhaust end to produce a supersonic thrust.

27. (Amended) The jet engine of claim 25 wherein the control mechanism comprises:

a heating mechanism to heat said second stream such that the velocity of the turbulent eddies of the second stream is subsonic relative to an ambient stream.

28. (Amended) The jet engine of claim 14 further comprising:

a combustion chamber located along a first passage such that a portion of said first passage is disposed to receive a first flow between said combustion chamber and said exhaust end, the first flow forming said supersonic stream.

35. (New) The jet engine of claim 28 wherein the control mechanism comprises:

a heating mechanism located along a second passage such that a portion of said second passage is disposed to receive a second flow between said heating mechanism and said exhaust end, said second flow forming the subsonic stream.

STATEMENT OF STATUS AND SUPPORT FOR CLAIM CHANGES IN ACCORDANCE TO 37 C.F.R. §1.173(c)

Claim Number	Status	Support in disclosure and explanation
1	pending	col. 6 (lines 1-67); col. 8 (lines 33-47); col. 8 (lines 54-67); col. 9 (lines 1-27)
5	pending	col. 8 (lines 33-47) and change claim dependency
6	pending	col. 9 (lines 24-27) and change claim dependency
7	pending	remove redundant phrase
16, 17, 18	pending	change claim dependency
26	pending	col. 7 (lines 56-57); col. 8 (lines 1-5)
27	pending	correct antecedent basis
28	pending	col. 7 (line 56-57); col. 8 (lines 1-5)
35	new	col. 8 (lines 33-37); col. 9 (lines 8-9); col. 10 (lines 2-5); col. 10 (lines 10-14)